

## **Mission Statement for Subcommittee I Electronic Health Record Status in Virginia And Lessons Learned From Other States**

To survey the status of Electronic Health Record (EHR) adoption in Virginia and other states and to identify strategies to facilitate wider EHR adoption and Regional Health Information Organizations (RHIO) development.

### **Other State's Experiences with Electronic Health Records**

In order to begin to ascertain what electronic health information activities are underway in other states, the Association of State and Territory Health Officials (ASTHO) convened a conference call to discuss this issue. Nine states participated in the call with four of those states being recipients of an Agency for Healthcare Research and Quality (AHRQ) eHealth grants. The following themes emerged:

- The key drivers of eHealth initiatives are the desire to curb rising healthcare costs through reduction of medical errors and to reduce provider inefficiencies due to lack of data to support patient care.
- Substantial struggles with defining the role of the state in fostering the development of eHealth initiatives were reported. However, all states formed governance bodies composed of representatives from all stakeholders.
- States recognized the need for public health involvement. Those states that did not receive some sort of federal grant assistance are building on their existing public health reporting infrastructure, such as immunization registries, to create more robust health information systems.
- Financing and funding to support ongoing operations is a challenge. Federal grants and contracts serve as the major revenue source for upfront funding.

#### **Case Study: Indiana**

**Indiana formed a study committee based on the Institute of Medicine's Medical Error Report. As a result of this work, legislation was recently passed to establish a Medical Informatics Commission with the goal of implementing Mission Statement for Subcommittee I  
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Detailed information about EHR in the states participating in the ASTHO conference call can be found in Appendix 1.

Another source of information about other states comes from the eHealth Initiative Foundation's second annual survey of state, regional and community-based health information exchange initiatives. Health information exchange is defined as the mobilization of health information electronically across organizations within a region or community. The number of respondents tripled from the previous year with sixty-five organizations or 60 percent of the respondents identifying themselves as "advanced" or well underway with implementation. The survey findings pointed out that without broad adoption of national standards, the creation of innovative capital funding sources to support start-up costs, and the alignment of incentives to support the mobilization of information through eHealth to support patient care, the efforts to expand interoperability may move at a slow pace. The analysis of this survey produced the following key findings:

- Health information exchange activity is on the rise. The reported number of exchange organizations considered fully operational increased from nine in 2004 to 25 in 2005.
- The key driver moving states, regions and communities toward health information exchange is provider inefficiency due to lack of data to support patient care.
- Health information exchange efforts recognize the importance of privacy and security.
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### **Case Study: New York**

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conducted by the Center for Information Technology Leadership with support from the United Hospital Fund, which indicates that the net benefit associated with “level four” interoperability within New York over ten years is \$12.4 billion.

The New York State Department of Health (NYSDOH) is also focusing on opportunities for technology policy coordination. The NYS HIT Working Group has been established as a vehicle to communicate and coordinate across a wide variety of state agency components – Medicaid, public health, professional licensure, technology procurement, and capital financing. Several funding opportunities that directly or indirectly relate to health information technology are in process:

- HEAL-NY funds were approved in the state’s 2005 budget, and additional federal waiver funds may soon be available.
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denominator used in these results, not the individual physician. Based on the sample size, the error rate is 8.7%. Further information concerning the use of EHR in physician practices can be found within the Subcommittee II report.

## **Electronic Health Record Survey**

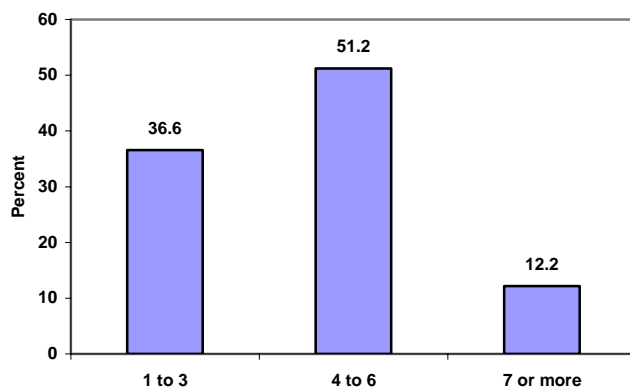
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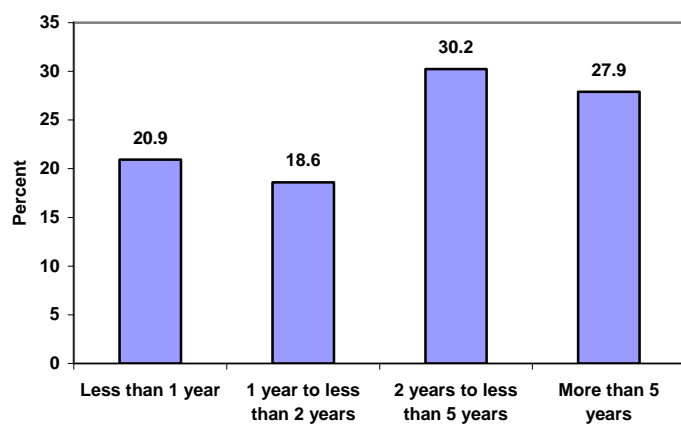
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- Only 33% of respondents (42 of 126) said that they currently have an EHR in use today.
  - 12% (15 of 126) reported 3 components or less (of 11 total components)
  - 17% (21 of 126) reported 4 to 6 components
  - 4% (5 of 126) reported 7 or more components
- Of those who said they had an EHR, 36.6% utilized 3 components or less.

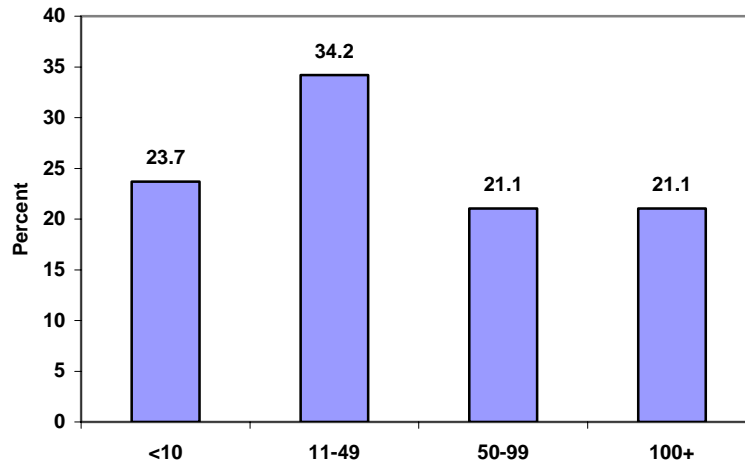


- Those in a hospital setting (60%) were more likely than those in large group practice (3 or more doctors; 33%) and small group practice (2 or less doctors; 17%) to have and EHR.

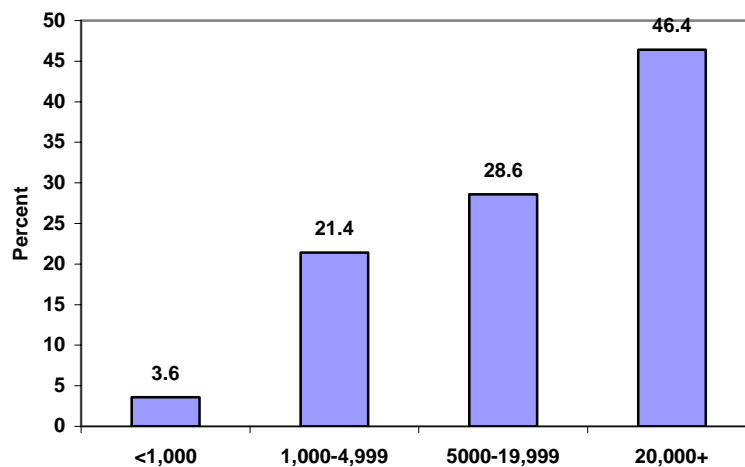
### **Q2a. How many years have you had your current electronic health record system?**



**Q2b. On average, how many staff currently use the electronic health record system?**



**Q2c. On average, how many patient records are currently in your system?**



**Q3. Please tell me whether you currently use this feature of an EHR:**

Electronic Health Record Feature	Percent Currently Using this Feature
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**Q4. Are you currently experiencing any problems with your EHR system?**

Only 21% (9 of 42) of those with an EHR reported problems.

**Q5. What are the benefits that you have experienced since using an EHR system?**

<b>Benefit</b>	<b>Pct</b>
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For those who do not currently have an EHR:

**Q6. Do you plan on implementing an electronic health record system in the next 2 years?**

Of those who do NOT have a current EHR, 18% (14 of 79) plan to in the next 2 years, 54% (43 of 79) were not, and 28% (22 of 79) were not sure.



**Q7. What is the biggest barrier to adopting an electronic health record system?**

Cost is mentioned by 33% (27 of 81) respondents.

Other barriers mentioned included:

- 10% Small office, no need for EHR (8 of 81)
- 9% No interest, like existing system, don't see benefits (7 of 81)
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## Workforce Capacity for Electronic Health Record Adoption

**Another possible barrier to wider adoption of EHR's is the availability of trained staff to manage the process.**

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Medical Education Campus, Northern Virginia Community College and Tidewater Community College.

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The estimated demand for health care workers in 2010 and 2020 is noted on the following chart.

**Estimated Demand for Health Care Workers through  
2020**

Occupation Title	Current Employment	Current Shortage	Current Demand	Projected Health Care Workforce Needs by 2010	Projected Health Care Workforce Needs by 2020	Percent Shortage in Workforce by 2020
Registered nurses (including CRNAs, nurse practitioners, and nurse midwives)	9,082	1,038	10,120	12,056	15,432	41.1%
Nursing aides, orderlies, certified nurse assistants, attendants	3,245	323	3,568	4,251	5,441	40.4%
Medical records and health info technicians	1,337	172	1,509	1,872	2,547	47.5%
Dental assistants	1,110	20	1,130	1,402	1,906	41.8%
Medical and nurse managers	1,054	76	1,130	1,345	1,722	38.8%
Home health aides	1,080	40	1,120	1,334	1,708	36.8%
Dental hygienists	750	30	780	967	1,316	43.0%
Emergency medical technician/ paramedics	864	19	883	1,052	1,347	35.9%
Radiologic technologists and technicians	723	109	832	991	1,268	43.0%
Licensed practical nurses	1,111	390	1,501	1,669	1,919	42.1%
Physical therapists	573	119	692	825	1,056	45.7%
Physical therapist assistants	255	91	346	430	584	56.3%
Occupational therapists	350	67	417	496	635	44.9%
Respiratory therapists	233	39	272	324	415	43.9%
CT scanning technologists	237	24	261	312	399	40.6%
Medical and clinical lab technologists	397	30	427	474	545	27.2%
MRI technologists	172	22	194	232	296	41.9%
Speech language pathologists	122	46	168	200	256	52.3%
Pharmacy technicians	149	16	165	196	251	40.6%
Pharmacists	139	24	163	194	249	44.2%
Surgical technologists	134	21	155	184	236	43.2%
Medical and clinical lab technicians	228	32	260	289	332	31.3%
Phlebotomists	156	15	171	190	218	28.4%
Surgical technicians	33	-	33	40	51	35.3%
<b>Grand Total</b>	<b>23,534</b>	<b>2,763</b>	<b>26,297</b>	<b>31,325</b>	<b>40,129</b>	<b>41.4%</b>
Projected Health Care Workforce Vacancies from Current Employment Estimates				7,791	16,595	

This Pricewaterhouse Coopers study for Northern Virginia found there was an 11% shortage of medical records technicians, which is the equivalent of 172 open positions in the Northern Virginia service area alone. To eliminate the shortage and keep up with anticipated demand and population growth, Northern Virginia will need to add over 363 technicians by 2010 and another 675 by 2020. An average of seven medical records technicians graduated each year from Northern Virginia Community Colleges between 1999 and 2003. At this graduation rate, an addition 49 technicians will be added to the workforce by 2010, **314 below market demand estimates just for Northern Virginia.**

## **Task Force I Recommendations:**

- **Establish an ongoing statewide Health Information Technology Leadership Group.**
- **Conduct financial modeling to demonstrate the cost/benefit of EHR adoption for physician practices.**
- **Participate on the federal level to support the adoption of EHR standards.**
- **Review action steps of the NoVaHealth FORCE regarding the expansion of education in healthcare technology for its applicability to all of Virginia.**
- **In the state's role as a purchaser, work closely with the Department of Human Resources and Medicaid to establish incentives for EHR adoption.**
- **Appropriate state monies to facilitate increased RHIO development and other eHealth initiatives.**

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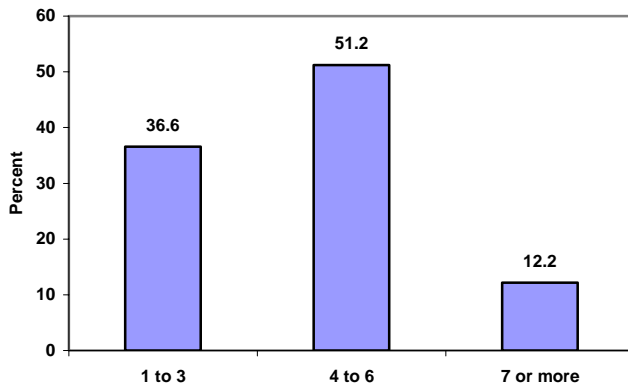
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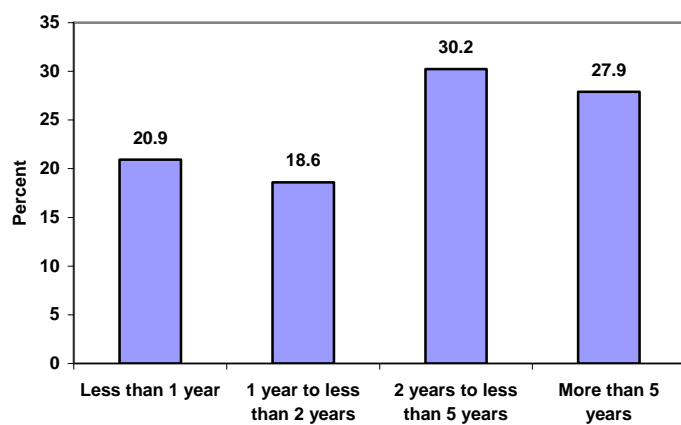
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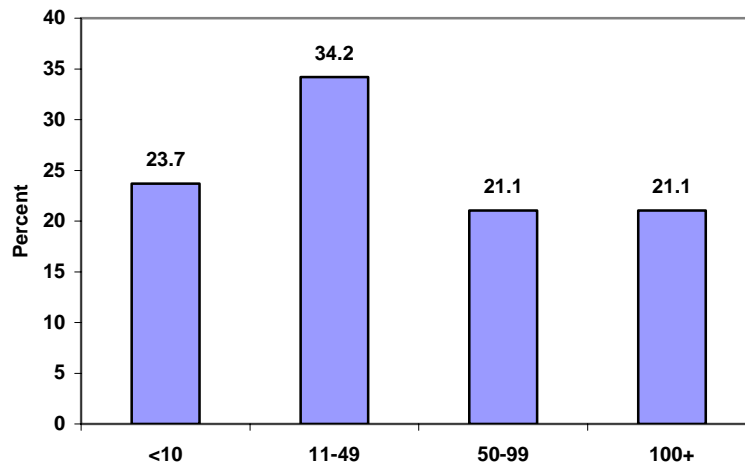
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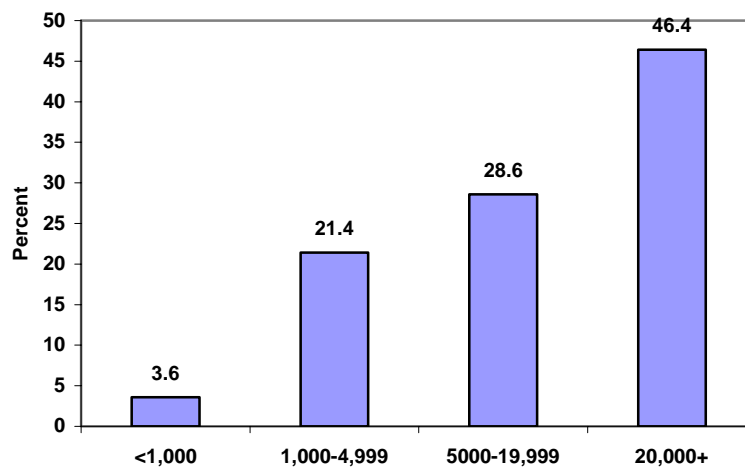




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<b>Occupation Title</b>	<b>Current Employment</b>	<b>Current Shortage</b>	<b>Current Demand</b>	<b>Projected Health Care Workforce Needs by 2010</b>	<b>Projected Health Care Workforce Needs by 2020</b>	<b>Percent Shortage in Workforce by 2020</b>
Registered nurses (including CRNAs, nurse practitioners, and nurse midwives)	9,082	1,038	10,120	12,056	15,432	41.1%
Nursing aides, orderlies, certified nurse assistants, attendants	3,245	323	3,568	4,251	5,441	40.4%
Medical records and health info technicians	1,337	172	1,509	1,872	2,547	47.5%
Dental assistants	1,110	20	1,130	1,402	1,906	41.8%
Medical and nurse managers	1,054	76	1,130	1,345	1,722	38.8%
Home health aides	1,080	40	1,120	1,334	1,708	36.8%
Dental hygienists	750	30	780	967	1,316	43.0%
Emergency medical technician/ paramedics	864	19	883	1,052	1,347	35.9%
Radiologic technologists and technicians	723	109	832	991	1,268	43.0%
Licensed practical nurses	1,111	390	1,501	1,669	1,919	42.1%
Physical therapists	573	119	692	825	1,056	45.7%
Physical therapist assistants	255	91	346	430	584	56.3%
Occupational therapists	350	67	417	496	635	44.9%
Respiratory therapists	233	39	272	324	415	43.9%
CT scanning technologists	237	24	261	312	399	40.6%
Medical and clinical lab technologists	397	30	427	474	545	27.2%
MRI technologists	172	22	194	232	296	41.9%
Speech language pathologists	122	46	168	200	256	52.3%
Pharmacy technicians	149	16	165	196	251	40.6%
Pharmacists	139	24	163	194	249	44.2%
Surgical technologists	134	21	155	184	236	43.2%
Medical and clinical lab technicians	228	32	260	289	332	31.3%
Phlebotomists	156	15	171	190	218	28.4%
Surgical technicians	33	-	33	40	51	35.3%
<b>Grand Total</b>	<b>23,534</b>	<b>2,763</b>	<b>26,297</b>	<b>31,325</b>	<b>40,129</b>	<b>41.4%</b>
Projected Health Care Workforce Vacancies from Current Employment Estimates				7,791	16,595	

This Pricewaterhouse Coopers study for Northern Virginia found there was an 11% shortage of medical records technicians, which is the equivalent of 172 open positions in the Northern Virginia service area alone. To eliminate the shortage and keep up with anticipated demand and population growth, Northern Virginia will need to add over 363 technicians by 2010 and another 675 by 2020. An average of seven medical records technicians graduated each year from Northern Virginia Community Colleges between 1999 and 2003. At this graduation rate, an addition 49 technicians will be added to the workforce by 2010, **314 below market demand estimates just for Northern Virginia.**

### **Task Force I Recommendations:**

- **Establish an ongoing statewide Health Information Technology Leadership Group.**
- **Conduct financial modeling to demonstrate the cost/benefit of EHR adoption for physician practices.**
- **Participate on the federal level to support the adoption of EHR standards.**
- **Review action steps of the NoVaHealth FORCE regarding the expansion of education in healthcare technology for its applicability to all of Virginia.**
- **In the state's role as a purchaser, work closely with the Department of Human Resources and Medicaid to establish incentives for EHR adoption.**
- **Appropriate state monies to facilitate increased RHIO development and other eHealth initiatives.**